

R E M A R K S

Careful consideration has been given to the Official Action of July 2, 2004, and reconsideration of the application as amended is respectfully requested.

The claims examined by the Examiner are Claims 1 - 14.

Claim 1 has been rejected under 35 U.S.C 102 (b) as been anticipated by or, in the alternative, under 35 U.S.C. 103(a) as been obvious over Ries et al. Claims 8 and 9 has been rejected under 35 U.S.C. 103(a) as been unpatentable over Ries et al.

Claims 10 - 14 have been rejected under 35 U.S.C. 103(a) for being unpatentable over Ries et al., in view of Bakoledis.

Claims 2 - 7 are objected to and have been indicated as containing allowable subject matter and would be allowable if rewritten in independent form.

Amendatory action has been taken in the application and it is respectfully submitted that this amendatory action places the application into condition for allowance.

The specification has been amended to provide section headings in accordance with 37 CFR 1.77.

Independent Claim 10 has been cancelled and replaced by Claim 15 which is dependent from Claim 1. Claim 1 has been amended and remains as the sole independent claim in the application. Claims 2-9 and 11-14 have been amended so as to be properly

dependent, directly or indirectly, from Claim 1. Claims 16-19 has been added and are dependent, directly or directly, from Claim 1.

As now presented the claims in the application are Claims 1-9 and 11-19. These claims are believed to be in allowable condition.

Claim 1 has been amended and is directed to a roller arrangement for folding booklets in which first and second pairs of rotatably driven rollers are arranged in succession and between which the booklets are intended to pass successively for being folded. The first pair of rollers are movably toward and away from each other and have a spring loading urging the rollers toward one another whereas the second pair of rollers are adapted for being adjustably spaced from one another.

In accordance with the invention, a mechanical means is arranged for following the insertion of a booklet between the rollers of the first pair of rollers to automatically adjust the mutual separation of the rollers of the second pair of rollers in response to separation between the rollers of the first pair of rollers produced by insertion of the booklet therebetween. Hence when the rollers of the first pair are moved apart upon insertion of the booklet therebetween, the rollers of the second pair are automatically adjusted in response to the separation of the rollers of the first pair. Specifically as seen in Fig. 3 when the booklet is inserted between the first pair of rollers 10, this causes the rollers 10 to separate and the lower end of the mechanical member 3 descend into the nip between the rollers 10 causing the opposite (upper) end of the member 3 to descend and permit the rollers 12 to separate from one another under the biasing tension applied to rollers 12. In this way there is a feedback between the spacing of the rollers 10 and the spacing of rollers 12 which occurs automatically when the booklet is inserted between the rollers 10.

The claimed construction avoids problems, especially when using low friction, glossy and slippery paper for the booklets, as discussed in the specification on, e.g., page 1, 2nd paragraph.

Claim 1 is rejected as anticipated by or, in the alternative, as obvious over Ries et al., (US Patent No. 5,169 376).

The rejection is respectfully traversed.

The device according to Ries et al., does not have any "mechanical means arranged for following the insertion of a booklet between the rollers of the first pair of rollers to automatically adjust the mutual separation of the rollers of the second pair of rollers in response to separation between the rollers of the first pair of rollers."

Ries et al., disclose a device for folding sheets comprising a first pair of rotatable prefolding rollers 3, 4 and a second pair of rotatable pressure rollers 8, 9. The rollers of the respective pair are spring-urged towards each other. The first pressure roller 8 is stationary mounted to the machine frame 1 for rotation. The second rotatable prefolding roller 4 is mounted on the free ends 15a of lever arms 15 pivotably mounted on the machine frame by stationary shaft 16. Connecting arms 21 are hinged at one end at the lever arm free ends 15a, cf. Figure 2. The second pressure roller 9 is mounted for rotation at the other ends of the connecting arms 21.

The operation of the sheet-folding device according to Ries et al., is as follows:

A sheet stack to be folded is suitably positioned in front of the device and a folding bar 5 is moved in direction A in Figure 1 to deform the sheet stack along a folding line to push the sheet stack 17 into the nip of the prefolding rollers 3, 4. The nip of the prefolding rollers 3, 4 then widens by compressing the springs 11, 18 until the prefolded stack of sheets is engaged by the rollers 3, 4.

When the nip of the pre folding rollers 3, 4 widens in this way, the connecting arms 21 pivot around shafts 14 and the pressure rollers 8, 9 remain in mutual contact due to the urging force from the springs 18. In the Ries et al. construction there are consequently no mechanical means for following the insertion of a sheet stack between the first pair of rollers to automatically adjust the mutual separation of the second rollers in response to separation between the rollers of the first pair of rollers, as specified in Claim 1 of the present application. Rather the pressure rollers 8, 9 remain in contact independent of the separation of the prefolding rollers 3, 4. The pressure rollers 8, 9 are separated only by the sheet stack 17 when it is advanced in between the rollers 8, 9.

In the Ries et al., device the pressure rollers 8, 9 are thus not separated until the prefolded sheet stack 17 is transported from the prefolding rollers 3, 4 to the pressure rollers 8, 9 and the second pressure roller 9 is urged in direction D in Figure 1 by further compressing the springs 18 when the sheet stack is advanced in between the pressure rollers 8, 9. This further compression of the springs 18 in turn enhances, via the connecting arms 21, the pressure of the second prefolding roller 4 against the first prefolding roller 3, cf. Ries et al., e.g. column 3, lines 26-35. In the Ries et al., device there is consequently no connection between the separation of the prefolding rollers 3,4 and the separation of the subsequent pressure rollers 8, 9 as between the first and second pairs of rollers in the present invention.


Thus, the device according to the cited Ries et al. patent does not have a mechanical means constructed as set forth in Claim 1, and the claimed roller arrangement according to the invention and the Ries et al. device operates in completely different ways as explained above. It is therefore, respectfully submitted that Claim 1 defines a patentable invention and is allowable.

With respect to the rejection of Claims 10 - 14 as being unpatentable over Ries et al., in view of Bakoledis. Claim 10 has been cancelled and replaced by Claim 15 dependent on Claim 1. Claim 15 is not subject to the rejection applied to Claim 10 as explained hereafter. Bakoledis shows a roller assembly for a machine for folding sheets to form envelopes. In the rollers grooves are formed at that portion of the rollers under which adhesive strips on the sheet will pass to prevent adhesively from being smeared over a wide area of the sheet. The claimed invention cannot be considered as obvious in view of Ries et al., and Bakoledis in combination either in that it is not only a matter of forming a groove but also providing a ring of flexible material to engage the staples of the booklets.

Claims 16 - 19 are directed to particular features of the mechanical means related to the automatically separation of the second pair of rollers 12 in response to the spacing of the first pair of rollers 10 when the booklet is inserted between the first pair of rollers. There is nothing in the cited art which shows such an arrangement.

For the above reasons it is respectfully submitted that the claims now present in the application are in allowable condition and favorable reconsideration is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Julian H. Cohen', written over a horizontal line.

JULIAN H. COHEN
LADAS & PARRY LLP
26 WEST 61ST STREET
NEW YORK, NEW YORK 10023
REG.NO.20302(212)708-1887